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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,154	09/30/2003	Nikolas Kaprinidis	PP/1-22766/A/CGC 2128	5597

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PATENT DEPARTMENT  
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EXAMINER

SANDERS, KRIELLION ANTIONETTE

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/675,154

Applicant(s)

KAPRINIDIS ET AL.

Examiner

Kriellion A. Sanders

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/30, 2/19</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haley et al, US Patent No. 53931812 in view of any secondary reference to Galbo et al, US Patent Nos. 5216156, 6271377, 5300544 or 5844026; Behrens et al, 5124378, or 5112890; Zedda et al, US Patent No. 6117995; Cortolano et al, US Patent No. 5004770 or Winter et al, US Patent No. 5204473.

Haley et al discloses a flame retardant, light stable composition, prepared from a polyolefin, a halogenated hydrocarbyl phosphate or phosphonate ester flame retardant, and an alkoxyamine functional hindered amine light stabilizer. Optionally, at least one UV light absorber may also be included, to provide further protection. Suitable flame retardants of the invention include the halogenated phosphate and phosphonate esters--particularly, the halogenated hydrocarbyl phosphate and phosphonate esters. one or more of these flame retardants may be used..

Suitable light stabilizers of Haley et al include the hindered amine light stabilizers which are alkoxyamine functional hindered amine light stabilizers, also known as NOR HALS. These include the succinate-based NOR HALS, and as alkoxy-blocked HALS. Particularly where both

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one or more alkoxyamine functional hindered amines, and one or more nonalkoxyamine functional hindered amines, are employed, the weight ratio, of alkoxyamine functional hindered amine to nonalkoxyamine functional hindered amine, preferably ranges from 1:5, or about 1:5, to 5:1, or about 5:1;

The nonalkoxyamine functional hindered amine light stabilizers which may be used are those which, in conjunction with alkoxyamine functional hindered amine, will provide the indicated results. One such hindered amine light stabilizer is commercially available as Tinuvin 622, from Ciba-Geigy Corporation. Another is commercially available as Chimassorb.TM. 119, from Ciba-Geigy Corporation. Yet another is commercially available as Chimassorb.TM. 944, from Ciba-Geigy Corporation.

2. The suitable UV light absorbers include such components which serve the intended purpose of UV light absorption, and are compatible with the compositions of the invention, without interfering with their intended properties and functions. The benzotriazole and hydroxybenzoate light absorbers are examples of those which may be employed.

The halogenated hydrocarbyl phosphate ester flame retardant is preferably present in an amount of between 0.5 percent, or about 0.5 percent, and 15 percent, or about 15 percent, by weight of the composition; more preferably, in an amount of between 0.5 percent, or about 0.5 percent, and 10 percent, or about 10 percent, by weight of the composition. Still more preferably, the halogenated hydrocarbyl phosphate ester is present in an amount of from 1 percent, or about 1 percent, to 5 percent, or about 5 percent, by weight of the composition; a particularly preferred range is between 2 percent, or about 2 percent, and 5 percent, or about 5 percent, by weight of the composition.

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The amount of UV light stabilizer, whether alkoxyamine functional hindered amine alone, or in combination with other stabilizer, such as one or more of those discussed above--is preferably from 0.01 percent, or about 0.01 percent, to 3 percent, or about 3 percent, by weight of the composition.

3. The compositions of the Haley et al. invention may be provided in any suitable form, such as fibers, coatings, films, textile structures (i.e., fabrics) and the like, in accordance with their intended function. Formulation of any electric part having a fiber coating or film derived from the Haley et al compositions is an obvious variation. See col. 2, line 34 through col. 16, line 68.

Each of the secondary references set forth above disclose specific species of conventional hydroxyl or hydrocarbyloxy hindered amines that correspond directly to those of applicant's claim 3 and are known to be suitable for providing UV stability to thermoplastic resins. See the claims of each reference.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to employ any of the conventional hindered amines of the secondary references in the compositions of Haley et al to derive their usual UV stabilizing properties, in the absence of a clear showing of unexpected results attributable to the specific species of hindered amine employed, and its combined use with a specific flame retardant and specific thermoplastic resin.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kriellion A. Sanders whose telephone number is 571-272-1122. The examiner can normally be reached on Monday through Thursday 6:30-7:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kriellion A. Sanders  
Primary Examiner  
Art Unit 1714

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